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**RATNER & PRESTIA**

Suite 301, One Westlakes, Berwyn

P.O. Box 980

Valley Forge, Pennsylvania 19482-0980

Telephone 610-407-0700 • Fax 610-407-0701

www.ratnerprestia.com

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TECHNOLOGY CENTER 2800

**FACSIMILE COVER SHEET**DATE: February 4, 2002OUR REF.: MTS-3181USTIME: 4:38 PMYOUR REF.: Serial No.: 09/471,981

FROM:	Allan Ratner/Jack J. Jankovitz
TO:	Examiner John Barlow/Examiner Robert Loper
COMPANY:	USPTO
FAX TELEPHONE:	(703) 308-7722
OFFICE TELEPHONE:	(703) 308-3126
TITLE OF DOCUMENT:	

Total Number of Pages: 26 (including this form)**COMMENTS****CONFIDENTIAL AND PRIVILEGED ATTORNEY/CLIENT INFORMATION**

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FORM PTO-1083

In re application of: E. Igaki et al.  
 Serial No.: 09/471,981  
 Filed: December 23, 1999  
 For: INK-JET RECORDING HEAD

ASSISTANT COMMISSIONER FOR PATENTS  
 Washington, D.C. 20231

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Sir:  
 Transmitted herewith is an amendment in the above-identified application

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- ☐ Small entity status of this application under 37 CFR 1.9 and 1.27 has been established by a verified statement previously submitted.
- ☐ A verified statement to establish small entity status under 37 CFR 1.9 and 1.27 is enclosed.
- ☐ No additional fee is required.

The fee has been calculated as shown below:

(Col. 1)	(Col. 2)	(Col. 3)
Claims Remaining After Amendment	Highest Number Previously Paid for	Present Extra
Total * 47	Minus **140	*0
Indep * 4	Minus ***3	*1
<input type="checkbox"/> First Presentation of Multiple Dependent Claim		

## SMALL ENTITY

Rate	Addt. Fee
x \$ 9	\$
x \$ 42	\$
+\$140	\$
TOTAL ADDIT. FEE	\$

## OTHER THAN A SMALL ENTITY

OR	Rate	Addt. Fee
OR	x \$ 18	\$
OR	x \$ 84	\$84.00
OR	+\$280	\$
OR	TOTAL	\$84.00

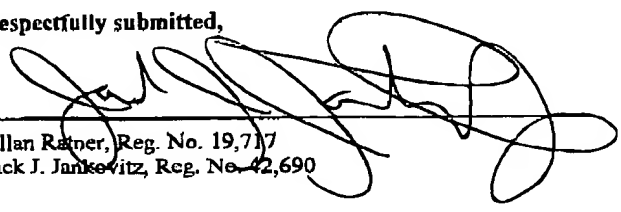
- \* If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3.
  - \*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, write "20" in this space.
  - \*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, write "3" in this space.
- The "Highest Number Previously Paid For" (Total or Independent) is the highest number found from the equivalent box in Col. 1 of a prior amendment or the number of claims originally filed.

- ☒ Please charge my Deposit Account No. 18-0350 the amount of \$84.00. A duplicate copy of this sheet is enclosed.
- ☐ A check in the amount of \$\_\_\_\_\_ is enclosed.
- ☒ The Assistant Commissioner for Patents is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 18-0350. A duplicate copy of this sheet is enclosed.
- ☒ Any filing fees under 37 CFR 1.16 for the presentation of extra claims.
- ☒ Any patent application processing fees under 37 CFR 1.17.

RATNER AND PRESTIA  
 Suite 301  
 One Westlakes, Berwyn  
 P. O. Box 980  
 Valley Forge, PA 19482-0980  
 (610) 407-0700

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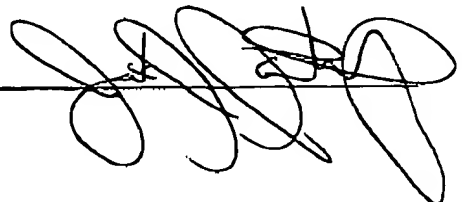
Respectfully submitted,

  
 Allan Ratner, Reg. No. 19,717  
 Jack J. Jankevitz, Reg. No. 42,690

## CERTIFICATE OF MAILING (37 CFR 1.8a)

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being facsimile transmitted to the United States Patent and Trademark Office on the date shown below.

Date: February 4, 2002

2/4/02 

MTS-3181US

#10/Amdt C  
2.6.02  
PATENT  
C. Wills

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: E. Igaki et al. : Art Unit: 2853  
Serial No.: 09/471,981 : Examiner: R. Loper  
Filed: December 23, 1999 :  
For: INK-JET RECORDING HEAD :

RESPONSE TO  
OFFICE ACTION DATED AUGUST 6, 2001

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FEB 04 2002

TECHNOLOGY CENTER 2000

Assistant Commissioner for Patents  
Washington, D.C. 20231

S I R :

Responsive to the Official Action dated August 6, 2001, please amend  
the above-identified application as follows

IN THE DRAWINGS:

Subject to approval by the Examiner in charge of the above-identified  
application, please amend Figures 3, 10, 11 and 12 as indicated in red on the  
enclosed marked-up copies of Figures 3, 10, 11 and 12.

IN THE SPECIFICATION:

Please replace the paragraph beginning at page 32, line 10:

C1  
This can be achieved if  $X \leq P/m$ , wherein X represents a deviation in the  
main scanning direction of one nozzle in an arbitrary nozzle array from another  
nozzle in a nozzle array nearest in the main scanning direction, m is an integer  
and P represents a pitch between the adjacent nozzles in one nozzle array. In  
the ink-jet recording head configured in this way, it is possible to align the  
nozzles projected in the sub-scanning direction at the highest aligning density.